

Why Building Private Clouds Makes Sense

There are 2 approaches to build a Private Cloud—Top Down approach, starting from service management and governance, and moving down toward virtualization; the Bottom Up approach being vice versa

Enterprises today are looking at cloud computing for various reasons—some need to take advantage of capex to opex conversion while others are looking at streamlining IT Services support and maintenance.

From a CEO's perspective cloud computing can reduce time for 'Go-to-Market' and eliminate capital expenditure; on the other hand, for a CIO it can provide quick scale-up and scale-down options, savings from maintenance and upgrades and enable self service and increased control.

While cloud computing to some may seem to be a magic bullet, certain areas

reveal difficulty and confusion when scratching the surface. Few questions that often linger in the minds of CIOs wanting to adopt cloud are:

- What will happen to my existing assets?

- Who ensures adherence to regulation and compliance for my IT environment on Cloud?

- How to ensure security and privacy of my data in the cloud?

While public cloud is one option that provides easy and economical scale up and down for compute and platform requirements, organizations have their own reservations in adopting public clouds that include accountability, SLAs,

and compliance. Public Cloud SLAs and contracts are vague for which providers can seldom be held accountable.

This leads organizations to look at an alternate delivery model—Private Clouds, wherein enterprises can have more control and can enforce accountability. What organizations are looking from a private cloud is participation by different internal departments who can subscribe and participate in its usage.

Few things to note before adopting a private cloud:

■ **Maturity of Virtualization in the Enterprise:** More maturity leads to easy adoption. If maturity is less, organizations can leap frog with the right approach

■ **Maturity of ITSM Processes Implemented:** Service Catalog, Financial Management, SLA management etc

■ **IT Organization Culture:** Adoption of private cloud essentially changes how services are delivered internally. Does the organization have service provider aspects to benefit from private cloud?

■ Is the Organization mature enough to adopt the ownership model for private cloud?

■ Has the Application Assessment been done for private cloud adoption?

■ Bandwidth is a neglected piece and should be taken care while estimating costs

Executing the Big 'C'

Private cloud is being seen as creating the biggest impact on the way cloud will shape in the coming future. It is therefore no surprise that many hardware/software vendors who on their own or jointly are bringing their private cloud offerings to the market. However enterprises must remember that there is always an alternate to create one's own private cloud using reference architecture.

Usually there are 2 approaches to build a private cloud—the Top Down approach, which starts from service management and governance and moves down towards virtualization and the

Bottom Up approach, which begins from virtualization and moves up to governance and service management.

No matter what approach you take, the most important question to think about is the aspect of service governance and IT service management on Cloud. Is ITIL still relevant in this new model? If so in what shape and form?

Broadly speaking, ITIL processes like incident management, change management, problem management, release and deployment, etc work the same way in cloud environment as they work in a non-cloud environment. The processes mostly affected in cloud environment are financial management, service catalog management, service level management, event management, and configuration management.

Another important question is around monitoring and management of IT environment on cloud. Depending on which delivery model you eventually choose, there will be a difference in the way monitoring and management works for the IT landscape. In public clouds it is the operating system and above that needs to be taken care, in private clouds it is hardware onwards that needs to be taken care.

The ideal way to go around this is to have an on-demand model for monitoring and management, wherein users have the option to choose services from a service catalog. An option for start and stop of these services as and when required is also a desired option.

Cloud means different things to different people. One should have a well defined objective for adopting cloud. Going forward we will see more and more organizations adopting cloud. One of the biggest hindrances for public cloud adoption is around security and compliance, which makes the case for building public clouds very strong. For enterprises looking at eliminating concerns around security and compliance along with maintaining control over their IT set-up, private cloud indeed might be the manna from heaven! ■

WHILE PRIVATE CLOUD IS CREATING THE BIGGEST IMPACT, ENTERPRISES MUST REMEMBER THAT THERE IS ALWAYS AN ALTERNATE TO CREATE ONE'S OWN PRIVATE CLOUD USING REFERENCE ARCHITECTURE



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